

traffic. Although undesirable, the streets which comprise the major thoroughfare system may also serve abutting property. However, **their major function is to carry traffic.** They should not be bordered by strip development because such development significantly lowers the capacity of the thoroughfare, and each driveway is a danger to traffic flow. Major thoroughfares may range from two lane streets to expressways with six or more traffic lanes. As a general rule, parking should not be permitted on major thoroughfares.

Figure 1 graphically illustrates the trade-off between the travel service and land service functions of the above types of facilities.

Operational Efficiency increases the capability of the street to carry vehicular traffic and people. In terms of vehicular traffic, a street's **capacity** is defined as "the maximum number of vehicles which can pass a given point on a roadway during a given time period under prevailing roadway and traffic conditions." Capacity is affected by the physical features of the roadway, nature of traffic, and weather.

Physical ways to improve vehicular capacity include street widening, intersection improvements, improving the vertical and horizontal alignment, eliminating road-side parking and eliminating property access points.

Operational ways to improve street capacity include:

- (1) **Control of access** - A roadway with complete access control can carry over two times the traffic handled by a non-controlled access street.
- (2) **Parking removal** - Increases capacity by providing additional street width for traffic flow and reducing friction to flow caused by parking operations.
- (3) **One-way operation** - The capacity of a street can be increased 50% or more, depending upon turning movements and overall street width, by initiating one-way traffic operations. One-way streets can also improve traffic flow by decreasing potential traffic conflicts and simplifying traffic signal coordination.
- (4) **Reversible lanes** - Reversible traffic lanes may be used to increase street capacity in situations where heavy directional flows occur during peak periods.
- (5) **Signal phasing and coordination** - Uncoordinated signals and poor signal phasing restrict traffic flow by creating excessive stop-and-go operation.